PROCEEDINGS

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TWO NEW PHILIPPINE FRUIT BATS.

BY N. HOLLISTER.

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Two new species of *Pteropus* have been found in the splendid series of fruit bats collected in the Philippine Islands by Dr. Edgar A. Mearns.

Pteropus balutus sp. nov.

Type from Balut Island, Serangani Group, south of Mindanao. U. S. National Museum No. 144760, skin and skull of ♀ adult, teeth much worn. Collected January 23, 1906, by Dr. Edgar A. Mearns. Orig. No. 6021.

Diagnosis.—Somewhat intermediate in characters between Pteropus speciosus and Pt. pumilus. Coloration of upperparts much as in pumilus, but slightly paler; size approaching that of speciosus, but slightly smaller, with noticeably shorter pollex.

Color of type.—Crown and anterior and posterior edges of mantle pale orange-yellow; center of mantle (nape and shoulders) darker, more ochraceous-tawny.* General color of back and rump wood-brown, a mixture of hairs of auburn and avellaneous; brighter and more reddish on hips. Throat buffy brown; breast, flanks, and anal region, ochraceous-tawny; middle belly buffy.

External measurements of type.—Collector's measurements: Length, 190 millimeters; alar expanse, 855. From dry skin: Forearm, 117.5; pollex, total length, c. u., 47.5; pollex metacarpal, 11.3; pollex first phalanx, 25; second digit, metacarpal, 59; first phalanx, 13; second-third phalanx, c. u., 12; third digit, metacarpal, 78.5; foot, c. u., 35.

Skull and teeth.—One side of the braincase and the mandible are so broken that only a few measurements are possible. The size and general characters of the skull seem essentially as in Pt. speciosus, with the rostrum more slender and interorbital breadth less. Front of orbit to tip of nasals, 18; least breadth of rostrum, 9.0; least interorbital breadth, 7.0. The teeth of the type are much worn, but appear to be as in speciosus.

^{*} Ridgway: Color Standards and Color Nomenelature, 1912. 26—Proc. Biol. Soc. Wash., Vol. XXVI, 1913.

Remarks.—This small Pteropus appears to be nearest related to Pt. speciosus from Malanipa Island, but is readily separated from that form by its much lighter color, above and below, and by the distinctly smaller pollex. From Pt. pumilus, of Palmas Island, which it greatly resembles in the color of the upperparts, it differs in its decidedly greater size. The single specimen was "found in the forest clinging to branch of deciduous tree."

Pteropus mearnsi sp. nov.

Type from Isabella, Basilan Island. U. S. National Museum No. 144739, skin and skull of \mathcal{O} adult. Collected January 26, 1906, by Dr. Edgar A. Mearns. Orig. No. 6024.

Diagnosis.—A member of the hypomelanus group. Coloration almost exactly like the darker specimens of Pteropus hypomelanus cagayanus; size considerably less, with much smaller skull.

Color.—Muzzle and head mummy-brown, lighter on crown; mantle chestnut; back and rump brownish black with wash of rusty. Breast Hessian brown, mixed with blackish; flanks and lower belly dark chestnut brown, with much blackish; center of belly lighter, golden ochraceous. Five adults are very uniform in color; a single young example has a much lighter mantle.

Skull and teeth.—Skull about intermediate in size between skulls of Pteropus speciosus and Pt. h. cagayanus. In general like skull of cagayanus, but considerably smaller, with relatively much larger braincase. Teeth essentially as in cagayanus.

Measurements of type.—Forearm, 123; pollex, total length, c. u., 55; second digit, total length, c. u., 89.5; third digit, metacarpal, 82.5; third digit, first phalanx, 61; foot, c. u., 41. Skull: Condylobasal length, 53.4; zygomatic breadth, 34; breadth braincase at zygomata, 22.4; front of orbit to end of nasal, 19.5; orbital diameter, 12; least breadth rostrum, 10.2; interorbital breadth, 8.5; upper toothrow, entire, 28; upper molar-premolar row, alveoli, 15.4; mandible, 46.5; lower tooth row, entire, 27.8; lower molar-premolar row, alveoli, 21.5.

Remarks.—Except for its smaller size, Pteropus mearnsi greatly resembles Pt. h. cagayanus; and it is conspicuously different from all other Philippine species. In size it approximates Pt. minus, but it differs greatly in color from that species. Six specimens have been examined, all collected by Doctor Mearns; four from Isabella, Basilan, and two from Zamboanga, Mindanao. The species apparently replaces the widely ranging Pt. h. cagayanus in these localities.